U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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TIN IN SEPTEMBER 1997

Domestic consumption of primary tin in September was estimated by the U.S. Geological Survey to be about 4% higher than in August 1997 and about 10% higher than in September 1996.

The *Platt's Metals Week* average composite price for tin in September was \$3.73 per pound, slightly higher than in August 1997 and about 9% lower than in September 1996.

U.S. Steel Corp. announced that it will form a joint venture with VSZ AS, the largest producer of flat-rolled steel in Slovakia, to meet the growing demand for tin mill products in Central Europe. U.S. Steel indicated that it would be a 50-50 joint venture that would add 200,000 tons of tin mill products annual capacity to VSZ's Ocel plant in Kosice, Slovakia. The Ocel plant now has a tin mill production capacity of 140,000 tons. The joint venture is expected to commence January 1, 1998 (American Metal Market, 1997b).

Hamco Mining and Smelting Co. (India) announced that it would be expanding its mine output and adding new smelting capacity in 1998, increasing its current tin output of about 6,000 tons annually by several thousand tons. Hamco officials announced the firm was preparing to join the UK-based International Tin Research Institute during the coming year. The "HAMCO" brand of refined tin was approved for listing on the London Metal Exchange this year (Platt's Metals Week, 1997).

Rasselstein Hoesch GmbH (Germany), a major tinplate producer, announced that it has been and will continue to provide technical assistance and tinplate feedstock for a new tinplate beverage can plant in Brazil. The new plant is owned by Metalic, a wholly owned subsidiary of Brazil's Vicunha industrial group, which is also a part owner of Brazil's only

tinplate producer, Companhia Siderurgica Nacional (CSN). The latter company has also been helping with the project and is expected to be the long-term supplier to the plant. Rasselstein officials stated that they are supplying Metalic with tinplate needed for the production of two-piece beverage cans, advising on technical issues, and helping with steel can marketing strategies. To date, only aluminum cans had been produced in Brazil. Metalic's officials observed that investment costs for the new tinplate can line had been about 5% higher than that of a comparable aluminum can line, but manufacturing costs are expected to be 10% lower because of the lower cost of tinplate. Customers for the new can line include the Brazilian operations of Coca-Cola and Pepsi-Cola; talks are underway with two major Brazilian breweries, Brahma and Antarctica. Brazil is considered one of the world's fastest-growing can markets. Forecasts by Datamarket Corp., a market analysis organization, indicate that Brazil will account for the consumption of 24 billion beverage cans in 2003, nearly tripling the estimated 1997 volume of 8 billion cans (American Metal Market, 1997a).

Update

On November 14, 1997, the *Platt's Metals Week* composite price for tin was \$3.75 per pound.

References Cited

American Metal Market, 1997a, Tinplate can line launched: American Metal Market, v. 105, no. 212, October 31, p. 3.

——1997b, U.S. Steel inks Slovakia deal: American Metal Market, v. 105, no. 216, November 6, p. 1.

Platt's Metals Week, 1997, Hamco to boost tin output: Platt's Metals Week, v. 68, no. 41, October 13, p. 8.

TABLE 1 SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

			1997	
				January-
	1996	August	September	September
Production, secondary e/ 2/	11,000	900	900	8,100
Consumption:				
Primary	36,500	3,010 r/	3,130	28,200
Secondary	8,180	902	910	8,090
Imports for consumption, metal	30,200	3,800	NA	NA
Exports, metal	4,780	410	NA	NA
Stocks at end of period	11,800	5,590 r/	5,480	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	412.43	369.01	372.60	XX
Metals Week New York dealer	288.10	255.67	259.00	XX
London, standard grade, cash	279.00	247.00	249.00	XX
Kuala Lumpur	275.19	243.18	244.30	XX

e/ Estimated. r/ Revised. NA Not available. XX Not applicable.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
1996 (annual)	436.25	388.49	412.43
1996:			
September	413.10	402.69	408.04
October	404.38	396.12	400.25
November	409.57	392.40	401.00
December	405.37	388.49	394.76
1997:			
January	404.19	387.89	396.17
February	403.46	390.40	395.64
March	401.81	389.32	395.64
April	393.82	380.00	386.55
May	393.67	378.72	386.59
June	384.93	374.20	377.81
July	375.61	362.36	370.10
August	377.46	362.60	369.01
September	384.65	362.91	372.60

^{1/} The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

Source: Platt's Metals Week.

^{1/} Data are rounded to three significant digits, except prices.

^{2/} Comprises tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

^{3/} From Platt's Metals Week.

^{4/} The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

 ${\bf TABLE~3}$ TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

	Tinplate (all forms)			
Tinplate waste (waste, strips,			Tin per metric ton	
cobbles, etc.)	Gross	Tin	of plate	
(gross weight)	weight	content	(kilograms)	Shipments 2/
177,000	1,550,000	9,450	6.1	2,490,000
15,900	140,000	853	6.1	204,000
13,600	138,000	775	5.6	183,000
12,700	144,000	676	4.7	205,000
13,800	147,000	776	5.3	210,000
13,200	147,000	721	4.9	213,000
12,800	137,000	782	5.7	218,000
12,900	143,000	741	5.2	204,000
12,900	136,000	687 r/	5.0 r/	213,000
14,300	146,000	813	5.6	NA
	(waste, strips, cobbles, etc.) (gross weight) 177,000 15,900 13,600 12,700 13,800 13,200 12,800 12,900 12,900	(waste, strips, cobbles, etc.) (gross weight) 177,000 1,550,000 15,900 140,000 13,600 13,600 13,800 147,000 13,800 147,000 13,200 147,000 12,800 12,900 143,000 12,900 136,000	Tinplate waste (waste, strips, cobbles, etc.) (gross weight) 177,000 1,550,000 9,450 15,900 140,000 853 13,600 138,000 775 12,700 144,000 676 13,800 147,000 776 13,200 147,000 721 12,800 137,000 782 12,900 143,000 741 12,900 136,000 687 r/	Tinplate waste (waste, strips, cobbles, etc.) Gross weight (gross weight) Tin of plate (kilograms) 177,000 1,550,000 9,450 6.1 15,900 140,000 853 6.1 13,600 138,000 775 5.6 12,700 144,000 676 4.7 13,800 147,000 776 5.3 13,200 147,000 721 4.9 12,800 137,000 782 5.7 12,900 143,000 741 5.2 12,900 136,000 687 r/ 5.0 r/

r/ Revised. NA Not available.

 ${\bf TABLE~4} \\ {\bf U.S.~TIN~IMPORTS~FOR~CONSUMPTION~AND~EXPORTS~1/}$

(Metric tons)

			1997	
	-			January-
Country or product	1996	July	August	August
Imports:		•		
Concentrates (tin content):				
Canada				13
Japan			33	37
Total			33	50
Metal (unwrought tin):				
Bolivia	6,290	794	704	4,150
Brazil	9,460	942	799	5,980
Chile	407			464
China	2,760	439	722	3,190
Hong Kong		219	39	258
India	898	60	220	1,360
Indonesia	7,550	684	648	5,110
Malaysia	965		17	1,010
Netherlands			200	200
Peru	481	574	380	4,490
Russia	435			480
Other	922	78	73	585
Total	30,200	3,790	3,800	27,300
Other (gross weight):				
Alloys	11,800	208	114	3,360
Bars and rods	695	64	165	610
Foil, tubes, and pipes	(2/)		(2/)	(2/)
Plates, sheets, and strip	641	66		121
Waste and scrap	6,740	154	120	1,350
Miscellaneous	1,360	186	145	968
Total	21,300	678	544	6,400
Exports (metal)	4,780	283	410	3,150

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits.

^{2/} Shipments data from American Iron and Steel Institute monthly publication AIS10.

^{2/} Less than 1/2 unit.

${\bf TABLE~5}$ CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

				1	1997 2/			
								January-
		-	August		-	September		September
Product	1996	Primary	Secondary	Total	Primary	Secondary	Total	total
Alloys (miscellaneous) 3/	W	32		32	57		57	318
Babbitt	851	W	W	W	10	W	10	150
Bar tin and anodes	1,150	8		8	8		8	W
Bronze and brass	2,760	51	102	153	55	95	150	1,420
Chemicals	7,520	662	W	662	624	W	624	5,770
Collapsible tubes and foil	240	W	W	W	27	W	27	210
Solder	15,600	493 r	/ W	493 r/	481	W	481	4,550
Tinning	2,030	73		73	73		73	1,010
Tinplate 4/	9,350	687 r	/	687 r/	813		813	6,830
Tin powder	573	W		W	W		W	192
White metal 5/	1,340	W		W	W		W	W
Other	3,230	102	300	402	83	315	398	3,260
Total reported	44,700	2,110 r	/ 402	2,510 r/	2,230	410	2,640	23,700
Estimated undistributed								
consumption 6/		900	500	1,400	900	500	1,400	12,600
Total	44,700	3,010 r	/ 902	3,910 r/	3,130	910	4,040	36,300

- r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."
- $1/\,\textsc{Data}$ are rounded to three significant digits; may not add to totals shown.
- 2/ Annual respondent data not prorated for individual end use data.
- 3/ Includes terne metal.
- 4/ Includes secondary pig tin and tin acquired in chemicals.
- 5/ Includes pewter, britannia metal, and jewelers' metal.
- 6/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

·	Monthly
Period	disposals 2/
1996:	
September	2,300
October	
November	210
December	200
Year total	6,670
1997:	
January	215
February	200
March	115
April	60
May	200
June	60
July	210
August	220
September	45
Total	1,330

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Defense Logistics Agency.

^{2/} These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.